

CLAIMS

What is claimed is:

1 1. An apparatus, comprising:
2 means for establishing communications between a first network and a second
3 network in proximity to the first network;
4 means for predicting a time period during which communications between the
5 first network and the second network can be made; and
6 means for transferring information between the first network and the second
7 network so that said transferring means completes the information transfer within the
8 time period.

1 2. An apparatus as claimed in claim 1, further comprising means for determining
2 whether a remaining time period exists subsequent to said transferring means completing
3 the information transfer within the time period so that said transferring means is capable
4 of executing an additional information transfer completed within the remaining time
5 period.

1 3. An apparatus as claimed in claim 1, the first network comprising at least one of
2 the following structures: a home network, a local area network, a wide area network, a
3 vehicle area network, a personal area network, a fabric area network, and a world wide
4 network.

1 4. An apparatus as claimed in claim 1, the second network comprising at least
2 one of the following structures: a home area network, a local area network, a wide area
3 network, a vehicle area network, a personal area network, a fabric area network, and a
4 world wide network.

1 5. An apparatus as claimed in claim 1, said predicting means predicting the time
2 period based on at least one or more of the following: file size, data rate, user preference,
3 and file priority.

1 6. An apparatus as claimed in claim 1, in the event at least one of the first
2 network and the second network is a vehicle area network, said predicting means
3 predicting the time period based on at least one or more of the following: file size, data
4 rate, user preference, file priority, vehicle status, engine status, passenger status, door
5 status, trunk status, hood status, fuel cap status, and garage door status.

1 7. An apparatus, comprising:
2 a local area network having at least one or more devices communicatively
3 coupled on said local area network;
4 means for establishing communications with a vehicle area network having at
5 least one or more devices communicatively coupled on the vehicle area network;
6 means for predicting a time period during which communications between said
7 local area network and the vehicle area network can be made; and
8 means for transferring information between said local area network and the
9 vehicle area network so that said transferring means completes the information transfer
10 within the time period.

1 8. An apparatus as claimed in claim 7, further comprising means for determining
2 whether a remaining time period exists subsequent to said transferring means completing
3 the information transfer within the time period so that said transferring means is capable
4 of executing an additional information transfer completed within the remaining time
5 period.

1 9. An apparatus, comprising:
2 a vehicle area network having at least one or more devices communicatively
3 coupled on said vehicle area network;
4 means for establishing communications with a local area network having at least
5 one or more devices communicatively coupled on the local area network;
6 means for predicting a time period during which communications between said
7 vehicle area network and the local area network can be made; and

8 means for transferring information between said vehicle area network and the
9 local area network so that said transferring means completes the information transfer
10 within the time period.

1 10. An apparatus as claimed in claim 9, further comprising means for
2 determining whether a remaining time period exists subsequent to said transferring means
3 completing the information transfer within the time period so that said transferring means
4 is capable of executing an additional information transfer completed within the remaining
5 time period.

1 11. A method, comprising:
2 establishing communications between a first network and a second network in
3 proximity to the first network;
4 predicting a time period during which communications between the first network
5 and the second network can be made; and
6 transferring information between the first network and the second network so that
7 said transferring means completes the information transfer within the time period.

1 12. A method as claimed in claim 11, further comprising determining whether a
2 remaining time period exists subsequent to completion of said transferring step within the
3 time period, and if a remaining time period exists, again executing said transferring step
4 with an additional information transfer to be completed within the remaining time period.

1 13. A method, comprising:
2 establishing communications between a local area network and a vehicle area
3 network when the vehicle area network enters a communication range of the local area
4 network;
5 determining a status of the vehicle and communicating the status of the vehicle to
6 the local area network;
7 predicting a time period during which the vehicle area network will remain within
8 communication range of the local area network so that communications may occur, said

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9 predicting step being based at least in part on the vehicle status determined in said
10 determining step;

11 selecting an appropriate file capable of being transferred within the time period
12 predicted in said predicting step; and

13 transferring the file between the local area network and the vehicle area network
14 during the time period.

1 14. A method as claimed in claim 13, further comprising the step of additionally
2 determining whether a remaining time period exists subsequent to execution of said
3 transferring step within the time period, and if a remaining time period exists, additionally
4 executing said transferring step for an additional file capable of being transferred within
5 the remaining time period.

1 15. A method as claimed in claim 13, said vehicle status determining step
2 including obtaining at least one or more of the following: file size, user preference, data
3 communication rate, engine status, passenger status, door status, trunk status, hood status,
4 fuel cap status, and garage door status.

1 16. A method as claimed in claim 13, said time period predicting step being
2 based on at least one or more of the following: file size, user preference, data
3 communication rate, engine status, passenger status, door status, trunk status, hood status,
4 fuel cap status, and garage door status.

1 17. A method as claimed in claim 13, wherein said selecting step is based at least
2 in part on at least one or more of the following: file importance, file size, file priority, and
3 user preference.

1 18. A method as claimed in claim 13, the local area network comprising at least
2 one of the following structures: a home network, a wide area network, a vehicle area
3 network, a personal area network, a fabric area network, and a world wide network.

1 19. A method as claimed in claim 13, the vehicle area network comprising at
2 least one of the following structures: a home network, a wide area network, a personal
3 area network, a fabric area network, and a world wide network.

1 20. A method as claimed in claim 13, the local area network comprising at least
2 one of the following structures: a gas station, a truck stop, a residence, a business
3 establishment, a restaurant, a rest area, a tourist stop, a rental car facility, a warehouse, a
4 theater, a service station, a parking lot, a parking garage, an event stadium, and a
5 shopping mall.

1 21. An apparatus, comprising:
2 means for establishing communications between a first network and a second
3 network in proximity to the first network;
4 means for determining an amount of data to be transferred between the first
5 network and the second network, the amount being based at least in part on a personal
6 profile of at least one or more users of at least one of the first network and the second
7 network; and
8 means for transferring information between the first network and the second
9 network based at least in part on the personal profile of at the at least one or more users.

1 22. An apparatus as claimed in claim 21, the personal profile of the at least one or
2 more users including a schedule of the at least one or more users.

1 23. An apparatus as claimed in claim 21, said means for transferring information
2 transferring information based at least in part on a priority determined by said
3 determining means from the personal profile of the at least one or more users.

1 24. An apparatus as claimed in claim 21, said means for transferring information
2 transferring information based at least in part on a priority of a first one of the at least one
3 or more users relative to another one of the at least one or more users determined by said

